

IN THE SPECIFICATION:

Please amend paragraphs [002], [006], [007], [010], [014] – [029], [036], [038] - [040] and add paragraph [047] as shown below, in which deleted terms are shown with strikethrough and added terms are shown with underscoring.

Paragraph [002]

2. Description of the ~~Prior~~ Background Art

Conventionally, an inlet pipe which constitutes a fuel inlet has a shape in which one end of the pipe is eccentrically expanded so that a fuel feed nozzle can be inserted therein, a screw structure is formed in this expanded portion so that a cap can be attached thereto, and a seal portion is formed by curling the end of the expanded portion so as to prevent fuel from leaking between the inside surface of the cap (~~D1~~). See, for example, D1: Japanese Patent Application Publication 2000-334521 334512 ('D1' hereinafter).

Paragraph [006]

SUMMARY OF THE INVENTION

To solve the above-mentioned problems, according to a first aspect of the present invention, there is provided a method for manufacturing a fuel inlet comprising the steps of expanding one end of a long-length metal pipe (stainless pipe), cutting off the tip of ~~the~~ a long-length metal pipe which has becomes non-uniform as a result of the expanding step, forming a screw structure in the one end of the long-length metal pipe, cutting off ~~the~~ a tip of the long-length metal pipe which has becomes non-uniform as a result of the screw structure forming step, and curling the one end of the long-length metal pipe such that it ~~which~~ becomes uniform so as to provide a seal portion.

Paragraph [007]

According to a second aspect of the present invention, there is provided a method for manufacturing a fuel inlet comprising the steps of preparing a short-length metal pipe (stainless

pipe), one end of which has a small diameter and the other end of which has a large diameter, by conducting a drawing process to a plate or conducting a drawing process or an expanding process to a short-length metal pipe, cutting off ~~a the~~ tip of the end having a large diameter ~~of the short-length metal pipe~~ which has becomes non-uniform, forming a screw structure in the end having a large diameter ~~of the short-length metal pipe in which~~ after the non-uniform tip has been cut off, cutting off ~~a the~~ tip of the short-length metal pipe which has becomes non-uniform as a result of the screw structure forming step, curling the end of the short-length metal pipe ~~which~~ such that it becomes uniform so as to provide a fuel feed nozzle retaining bracket having a seal portion, and welding the fuel feed nozzle retaining bracket to a long-length metal pipe, one end of which has been expanded.

Paragraph [010]

It is preferable to cut off the tip of the pipe from the inside diameter side toward the outside diameter side especially in the second cutting-off step. By doing so, when curl forming is conducted to the inlet pipe, any resulting burr is ~~allowed to be~~ located in the inside of the curl, and thus, human hands are protected from directly contacting with the burr. Also, there is no fear that the burr will be pinched even if a pipe expanding method having more processes is conducted.

Paragraph [014]

FIG. 1 is a diagram showing ~~all~~ an overall fuel inlet manufacturing processes according to the invention;

Paragraph [015]

FIGS. 2 (a) and (b) are partly sectional side ~~entire~~ views of a an entire fuel inlet;

Paragraph [016]

FIG. 3 is a sectional side view explaining ~~the~~ an expanding step according to the present invention;

Paragraph [017]

FIG. 4 is a sectional side view explaining ~~the~~ a tip cutting-off step according to the present invention;

Paragraph [018]

FIGS. 5 (a) and (b) are plan views explaining ~~the~~ a screw structure forming step according to one embodiment of the present invention;

Paragraph [019]

FIGS. 6 (a) and (b) are plan views explaining another embodiment of the screw structure forming step according to the present invention;

Paragraph [020]

FIGS. 7 (a) and (b) are plan views explaining still another embodiment of the screw structure forming step according to the present invention;

Paragraph [021]

FIG. 8 is a plan view explaining yet another embodiment of the screw structure forming step according to the present invention;

Paragraph [022]

FIGS. 9 ~~(a) and (b) are~~ is a sectional side views explaining a preliminary forming process for providing a seal portion according to the present invention;

Paragraph [023]

FIGS. 10 ~~(a) and (b) are views~~ is a sectional side view explaining a finishing forming process for providing a seal portion according to the present invention; and

Paragraph [024]

FIGS. 11 (a) and (b) are sectional side views explaining ~~the~~ a drawback caused in a case where the conventional method is employed.

Paragraph [025]

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Preferred embodiments of the present invention will now be described with reference to the accompanying drawings. FIG. 1 is a diagram showing all processes, ~~and the~~ in a summary of the method for manufacturing a fuel inlet according to the present invention, and will be explained below.

Paragraph [026]

First, a long-length stainless pipe (metal pipe) is prepared, and one end of this pipe is expanded e.g., by using a cored bar.

Paragraph [027]

Next, the tip of the expanded portion which has becomes non-uniform as a result of the above expanding step is cut off, and thereafter a screw structure is formed in the expanded portion by using a punch.

Paragraph [028]

Finally, the tip of the expanded portion which has becomes non-uniform as a result of the formation of ~~a~~ the screw structure is cut off, and thereafter curl forming is conducted to the tip of the expanded portion which becomes uniform by using a die to provide a seal portion.

Paragraph [029]

FIGS. 2 (a) and (b) are ~~entire~~ partly sectional side views of ~~a~~ an entire fuel inlet manufactured ~~by~~ according to the present invention.

Paragraph [036]

The main-forming punches 15 are in an open state when they are away from the center, ~~and~~ are in a closed state when they move to the center, and each punch abuts with the adjacent punches. The main-forming punches 15 have a forming edge 15a, and the radius of curvature of the forming edge 15a is equal to that of the groove portion of the screw structure to be formed. Also, the sub-forming punches 16 and the sub-forming punches 17 which are disposed between the main-forming punches 15 have a forming edge 16a and 17a respectively. The forming edge 16a has a round shape, and the forming edge 17a has the same shape as a portion to be left without being formed.

Paragraph [038]

Next, as shown in FIG. 5 (b), the sub-forming punches 16 and 17 are moved back, the main-forming punches 15 are advanced, and thereby a screw structure 5, 5 is formed on the circumference of the expanded portion 3, the screws of the screw structure 5, 5 being shifted by 180 degrees in the phase with respect to each other.

Paragraph [039]

FIGS. 6-8 show ~~another embodiment~~s of the screw structure forming apparatus. In the embodiment shown in FIG. 6, the screw structure forming apparatus is comprised of a pair of main-forming punches 15 and a pair of sub-forming punches 17 for leaving a portion without being formed. In this embodiment, a portion to be left without being formed is pre-formed by advancing the sub-forming punches 17 as shown in FIG. 6 (a), and thereafter a screw structure 5, 5 is formed by advancing the main-forming punches 15 as shown in FIG. 6 (b).

Paragraph [040]

In the embodiment shown in FIG. 7, the screw structure forming apparatus is comprised of a pair of main-forming punches 15 and a pair of sub-forming punches 18 for maintaining the outside diameter of the expanded portion 3. In this embodiment, the sub-forming punches 18 are allowed to abut against the circumference of the expanded portion 3 in advance as shown in FIG.

7 (a), and thereafter a screw structure 5, 5 is formed by advancing the main-forming punches 15 as shown in FIG. 7 (b).

Paragraph [047]

Although there have been described in detail what are the present embodiments of the invention, it will be understood that variations and modifications may be made thereto without departing from the spirit or scope of the invention as indicated in the appended claims.